

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

REC'D 21 JUN 2006

WIPOT PCT

Applicant's or agent's file reference 12718PC2	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
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Applicant <b>POLY COAT PTY LTD et al</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report   |
| <input type="checkbox"/> Box No. II           | Priority  |
| <input type="checkbox"/> Box No. III          | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/> Box No. IV           | Lack of unity of invention  |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI           | Certain documents cited   |
| <input type="checkbox"/> Box No. VII          | Certain defects in the international application  |
| <input type="checkbox"/> Box No. VIII         | Certain observations on the international application   |

Date of submission of the demand 30 September 2005	Date of completion of this report 07 June 2006
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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000300

## Box No. I Basis of the report

1. With regard to the language, this report is based on:

☒ The international application in the language in which it was filed

☐ A translation of the international application into  
translation furnished for the purposes of:

, which is the language of a

☐ international search (under Rules 12.3(a) and 23.1 (b))

☐ publication of the international application (under Rule 12.4(a))

☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages **1-33** as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☒ the claims:

pages as originally filed/furnished

pages\* as amended (together with any statement) under Article 19

pages\* **34-35** received by this Authority on **30 September 2005** with the letter of **30 September 2005**

pages\* received by this Authority on with the letter of

☐ the drawings:

pages as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing *(specify)*:

☐ any table(s) related to the sequence listing *(specify)*:

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing *(specify)*:

☐ any table(s) related to the sequence listing *(specify)*:

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims 1-22	YES
	Claims	NO
Inventive step (IS)	Claims 15-17, 19-21	YES
	Claims 1-14, 18, 22	NO
Industrial applicability (IA)	Claims 1-22	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

D1 WO 2001/035719: page 6 lines 21-25, page 9 lines 6-30, page 12 line 32-page 14 line 13

D2 Organic Coating Technology Vol 1: page 240

D3 US 3953386: abstract, example 11

D4 WO 2000/071359: page 25 line 28-page 26 line 15, examples 1 and 2, claims 1, 6 and 10

D5 GB 2339785: abstract, page 10 line 12, page 13 line 15, page 25 lines 17-23

D6 US 3959193: abstract, column 3 lines 15-25

D7 US 4749564: column 2 lines 8-10, column 5 lines 22-29, column 3 line 23, example 2A, column 10 line 64-column 11 line 10

D8 US 5412000: abstract, example

D9 GB 1533652: page 2 lines 16-26, examples

D10 US 4055698: column 3 lines 5-23, column 4 line 45

D11 JP 61-111375: abstract

D12 EP 1505129: abstract, example 1

D13 US 5298552: abstract, Tables 1 and 2

**NOVELTY (N) Claims 1-22**

None of D1-D13 disclose a dispersion as claimed in claim 1 including an alkaline earth metal salt of a C9-C20 aliphatic fatty acid, therefore claims 1-22 are considered to fulfil the requirements of novelty. In addition, it is noted that none of these documents discloses a dispersion comprising a halogenated polyolefin as claimed in claims 15-17 and 19-20, or a coating method as claimed in claim 21.

**INVENTIVE STEP (IS) Claims 1-14, 18, 22**

D1 discloses a wood stain formulation comprising carboxy methyl cellulose butyrate acetate in water and an organic solvent. Butyl benzyl phthalate (page 13 line 19), surfactants (page 14 lines 1-8), acrylates (page 14 line 13) and pigments and extenders such as titanium dioxide and calcium carbonate (page 9 lines 6-29) are explicitly disclosed as additives to the formulation. D1 also discloses that other additives such as ketones, alcohols and silica may be added to the composition (see page 10 last two lines-page 11 lines 1-2, claim 6). Preparing the dispersion in a particular form, as recited by claims 6-11, is considered common general knowledge. Thus, D1 discloses all the features of claims 1-14, 18 and 22 other than an alkaline earth metal salt of a C9-C20 aliphatic fatty acid and a rust inhibitor (claims 5 and 8).

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. V

However, the addition of a rust inhibitor is not considered to render claims 5 and 8 inventive as it would be an obvious addition to a composition for coating metals.

Further, D1 discloses that flatting agents are suitable coating additives (page 13 line 5). D2 discloses that metallic soaps (eg calcium stearate, an alkaline earth metal salt of a C9-C20 aliphatic fatty acid) are flatting agents. Thus, the obvious combination of D1 and D2 destroys the inventiveness of claims 1-4, 6, 7, 9-14, 18 and 22.

Therefore, claims 1-14, 18 and 22 are not considered to fulfil the requirements of inventive step.

As above, claims 15-17 and 19-20 are considered inventive as they refer to the presence in the composition of a halogenated polyolefin.

Claim 21 is also considered inventive as no obvious combination of any of D1-D13 suggests a coating method in which an adhesion promoter is used prior to coating with a primer having the composition as now claimed.

CLAIMS

1. A dispersion comprising a thermoplastic cellulose polymer or a derivative thereof, a phthalate ester of a C<sub>1</sub>-C<sub>6</sub> alkylated aromatic alcohol, an alkaline earth metal salt of a C<sub>9</sub>-C<sub>20</sub> aliphatic fatty acid, a surfactant and further comprising one or more  
5 components selected from the group consisting of:  
a metal carbonate  
a white metal oxide,  
a solvent,  
a rust inhibitor, and  
10 a lower alkyl methacrylate polymer.
2. The dispersion of claim 1 comprising a lower alkyl methacrylate polymer.
3. The dispersion of claim 2 wherein the lower alkyl methacrylate polymer is an ethyl methacrylate polymer.
4. The dispersion of claim 1 comprising a metal carbonate, a white metal oxide, a  
15 lower alkyl methacrylate polymer and a solvent.
5. The dispersion of claim 1 comprising a metal carbonate, a white metal oxide, a lower alkyl methacrylate polymer, a solvent and a rust inhibitor.
6. The dispersion of Claim 1 in a solid form.
7. The dispersion of Claim 4 in a solid form.
- 20 8. The dispersion of Claim 5 in a solid form.
9. The dispersion of Claim 6 in a granulated form.
10. The dispersion of Claim 7 in a granulated form.
11. The dispersion of Claim 8 in a granulated form.
12. A primer comprising the dispersion of Claim 1 and a primer solvent.
- 25 13. The primer of claim 12 further comprising one or more components selected from the group consisting of: a C<sub>1</sub>-C<sub>6</sub> ketone, a C<sub>1</sub>-C<sub>6</sub> ester, a polymeric plasticizer and a halogenated polyolefin.
14. The primer of claim 13 further comprising one or more components selected from the group consisting of: an alcohol, a polyhydroxy magnesium silicate derivate,  
30 and a silicon dioxide powder.
15. A primer comprising a primer solvent, a lower alkyl methacrylate polymer, a C<sub>1</sub>-C<sub>6</sub> ketone, a C<sub>1</sub>-C<sub>6</sub> ester, a phthalate ester of a C<sub>1</sub>-C<sub>6</sub> alkylated aromatic alcohol, a polymeric plasticizer, a halogenated polyolefin and the dispersion of claim 4.
16. The primer of claim 15 further comprising the dispersion of claim 5.



17. The primer of claim 15 further comprising an alcohol, a thermoplastic cellulose polymer or a derivative thereof, a polyhydroxy magnesium silicate derivate and a silicon dioxide powder.

18. A method of manufacturing a primer including the steps of:

5 mixing a first primer solution comprising a primer solvent and a lower alkyl methacrylate polymer in a first vessel;

mixing a second primer solution comprising the dispersion of claim 6 in a second vessel;

10 mixing the first primer solution and the second primer solution together to form the primer.

19. A method of manufacturing a primer comprising:

mixing a first primer solution comprising a primer solvent and a lower alkyl methacrylate polymer;

15 mixing a second primer solution comprising a C<sub>1</sub>-C<sub>6</sub> ketone, a C<sub>1</sub>-C<sub>6</sub> ester, a phthalate ester of a C<sub>1</sub>-C<sub>6</sub> alkylated aromatic alcohol, and the dispersion of claim 7; and

mixing the first primer solution and the second primer solution together with a primer solvent, a C<sub>1</sub>-C<sub>6</sub> ketone, C<sub>1</sub>-C<sub>6</sub> ester, a polymeric plasticizer and a halogenated polyolefin to form the primer.

20 20. The method of manufacturing a primer of claim 19 wherein the second primer solution comprises the dispersion of claim 8.

21. A method for coating a surface of an article comprising:

25 coating the surface with an adhesion promoter comprising an aromatic hydrocarbon, a co-polymer of a C<sub>2</sub>-C<sub>6</sub> alkene and a vinyl ester and a chlorinated polyolefin; and

coating the surface with the primer of any one of claims 12-17.

22. An article coated with the primer of any one of claims 12-17.